

Final Report: Allied Landfill (OU1) Neighborhood Information Canvassing Outreach Event, September 2015

Background & Purpose:

The Western Michigan University (WMU) Environmental & Sustainability Studies Program and the Kalamazoo River Cleanup Coalition (KRCC) worked collaboratively with the Environmental Protection Agency (EPA) to develop the best informational materials concerning the Proposed Plan including the trade-offs between the clean-up options for the Allied Superfund Site. Students, professors, local government officials, concerned citizens and a representative for the EPA (Diane Russell) then combined forces to distribute information to the neighborhoods in closest proximity to the site. Our purpose for the canvassing event was to create a more informed public regarding the cleanup options for the Allied site, obtain citizen input, and to encourage participation, transparency and accountability in the decision-making process. Our intention was not to influence the decisions of local residents but simply to inform the public of the Proposed Plan and make them aware of the various avenues and opportunity to provide input and comment.

Methods:

Canvassers were each given a packet of information pertaining to the Site itself, the Proposed Plan and the Public Meetings. **Please see the Appendix for all materials related to the canvassing event.** They were also given a canvassing script and a few short questions to ask the community at large for their thoughts about the Site. In the script canvassers were asked to state their name, group affiliation (Western Michigan University, Kalamazoo River Cleanup Coalition) and why they had knocked on the door. In the script we clearly stated that we were there to inform citizens of the new Proposed Plan and to request residents get their voices heard and concerns addressed. Residents were then asked a series of simple questions for us to get a better feeling for the localized community. These included: 1) Are you familiar with the site, 2) Do you plan to come to the Public Discussions/Meetings, 3) Do you have any specific concerns about the site, and 4) Do you have any specific visions for the future use of the site (or what would you like to see there)? Please refer to figure 2 for

Results:

On Friday September 25th we set out on a mission with our 25 volunteers to inform the masses. The group knocked on roughly 1,600 houses and spoke to 420 citizens. This also meant that as a group we distributed almost 5,000 packets of information (door knocker, FAQ sheet, EPA's Proposed Plan). **Please see Figure One for a map (red lines indicate streets covered) of the neighborhood areas that were canvassed. Please see Figure Two for a complete breakdown of each day's accomplishments.** We did not receive much feedback in whether people would attend the public meetings or not. We were very successful in getting responses to people's concerns and their visions for the use of the site. We found that there is much confusion and lack of information concerning the site. Many believed that the site had already been cleaned up and that there was no present risk of PCB contamination. Others were heavily concerned with the possibility of the site leaking and contaminating the local aquifer that is located directly beneath the site. Canvassers also ran into a startling realization that many who had recently moved to the area were completely unaware of the issue at all. At the end of our canvassing we could clearly tell that there was a large gap between the community and the information they needed to be

aware of what was happening in their community. **Please see Figure Three for a complete list of responses to questions.**

Conclusions:

A positive notion one could take away from this short timeframe was that we live in a community that cares and is willing to protect its residents as long as the information is present. With our 25 volunteers and our group's determination we delivered information to over 1,600 homes! This means that over 1,600 families were given the information and awareness to do something positive in their community. We would like to thank everyone who helped accomplish our goal to distribute information to as many houses as possible. The process for the cleanup of the Allied site continues on and we have shown that we are a community who cares!

Figure 1. Finalized Map of Areas Surveyed (red lines indicate streets canvassed)

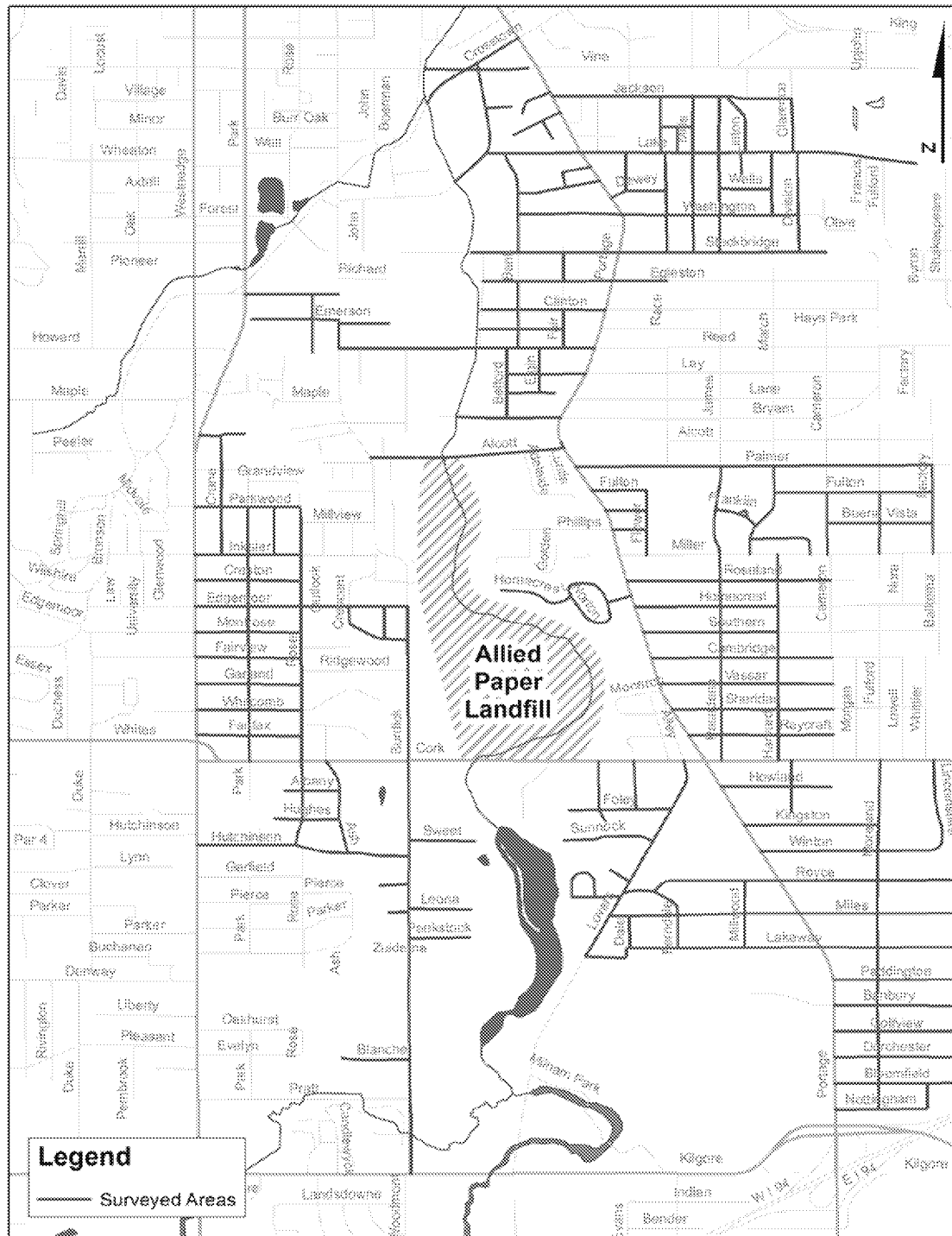


Figure 2. Breakdown of Each Day's Accomplishments

Friday September 25th

- approximate houses covered: 594
- approximate conversations had: 106
- Volunteers: Dave Benac, Kayla Johnson, Jack Urban, Kevin Wordleman, Jenny Zott, Renee Letz, Jennifer Clark, Drake Collins, Courtney Baum, Bill Wykhuis, Diane Russell, Joell Gisstennar, Michael Dresen, Denise Keele, Sarah Hill

Saturday September 26th

- Approximate Houses knocked: 578
- Approximate conversations had: 164
- Volunteers: Sharon Gill, Maarten Vonhof, Renee Letz, Diane Russell, Jake Peters, Nora Gimpel, Bill Wykhuis, Frank Lucarelli, Sarah Hill, Alex Farr, Bobby, Denise Keele, Drake Collins, Tucker Webb

Tuesday October 6th

- Approximate houses knocked: 100
- Approximate conversations had: 35
- Volunteers: Michael Dresen, Nora Gimpel

Thursday October 8th

- Approximate Houses Knocked: 100
- Approximate conversations had: 20
- Volunteers : Michael Dresen, Kaitlin

Friday October 9th

- Approximate Houses Knocked: 75
- Approximate conversations had: 15
- Volunteers: Michael Dresen, Austin Brewer

Monday October 12th

- Approximate houses knocked: 100
- Approximate conversations had: 36
- Volunteers: Nora Gimpel , Michael Dresen

Tuesday October 13th

- Approximate houses knocked: 100
- Approximate conversations had: 42
- Volunteer: Michael Dresen

Total houses knocked: 1,647

Total approximate conversations had: 418

Total Volunteers: 25

Approximate packets of materials delivered (english only): 4,941

Figure 3. Summary of Question Responses

Note: This represents only a tally; the frequency of these responses were not recorded. Therefore the responses are not ranked in any specific order.

- Do you have any specific Concerns? (not ranked in any order)
 - Why does the public have to pay for a corporate screw-up?
 - Why are we not doing a complete site clean up?
 - Will there be continued contamination of the local area?
 - Will the contamination affect the water supply in the area?
 - How are we going to clean everything up?
 - Will there be more contaminants brought in?
 - Will a cap and consolidation truly solve the problem?
 - believed the site had already been cleaned up.
 - What would the site be used for?
 - What have environmental scientists said about the contaminants in the area?
 - Where will the soil be moved to?
 - Does the movement of the soil lead to further contamination?
 - If we removed the contaminants would we be passing the problem off to another community?
 - How will it affect recreation in the Kalamazoo area (Fishing, Diving, ETC..)?
 - New residents desire more information
 - Why doesn't the purchaser or user of the lot have to pay for the cleanup of the site?

- Do you have any specific visions for the future of the site?
 - Eventual complete clean-up
 - Brew pubs
 - a Bi-centennial park
 - Cleaner river
 - Schools
 - Stripmall
 - leave it as an open lot
 - A preserve with no development.

APPENDIX:

ALLIED LANDFILL NEIGHBORHOOD INFORMATION CANVASSING MATERIALS

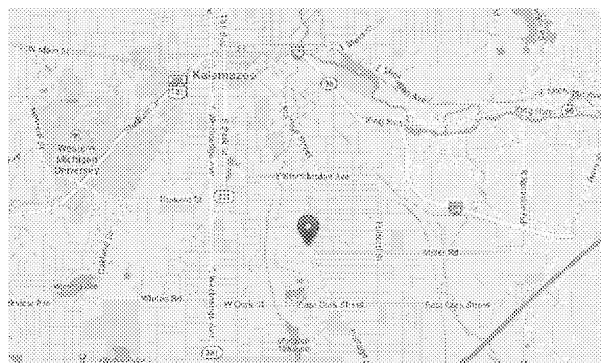
WMU ENVIRONMENTAL & SUSTAINABILITY STUDIES

GWEN FROSTIC OUTREACH EVENT FALL 2015



Co-sponsored by the Kalamazoo River Cleanup Coalition

ALLIED LANDFILL NEIGHBORHOOD INFORMATION CANVASSING



Named for the former Allied Paper Companies and located in the middle of Kalamazoo, this part of the SUPERFUND Site is a primary source of PCBs polluting the Kalamazoo River.

On the National Priority List since 1990, the Environmental Protection Agency will announce a proposed CLEANUP plan this September.

We need your help to create an informed public and encourage citizens to engage in and provide input to the decision-making process.



FRIDAY SEPTEMBER 25TH FROM 1:00-6:00pm

Information Session and Materials Overview (1:00pm)

Canvassing of the Edison, Homecrest and Milwood Neighborhoods (2:30–5:30pm)

Pizza Dinner Provided!

SATURDAY SEPTEMBER 26TH FROM 10:00am – 3:00pm

Information Session and Materials Overview (10:00am)

Canvassing of the Westnedge Hill and S. Westnedge Neighborhoods (11:30am-2:30pm)

Pizza Lunch Provided!

**ALL INFORMATION SESSIONS AND CANVASSING HEADQUARTERS LOCATED AT THE
GOODWILL BUILDING, 420 E. ALCOTT STREET, KALAMAZOO MI 49001**

TO SIGN UP TO CANVASS PLEASE CONTACT:

Dr. Denise Keele 269-387-5686 * denise.keele@wmich.edu

ALLIED LANDFILL NEIGHBORHOOD INFORMATION CANVASSING

Full Schedule, Canvassing Overview, Itinerary, Script & Individual Walk Sheets

Full Schedule of Public Involvement

September 25th and 26th - Information Canvassing led by WMU Environmental & Sustainability Studies Program and the Kalamazoo River Cleanup Coalition

September 30th - EPA releases Proposed Plan/Start of 60 day public comment period

October - TWO (2) EPA Community Roundtable with stakeholders and public

November – EPA public presentation of Proposed Plan/Public hearing

December – Close of Public Comment Period

Early 2016 - EPA finalize Record of Decision (including response to public comments)

Canvassing Overview & Rationale

The WMU Environmental & Sustainability Studies Program and the Kalamazoo River Cleanup Coalition worked collaboratively with the Environmental Protection Agency to develop the best informational materials concerning the Proposed Plan and the tradeoffs between the Clean Up Options for the Allied Superfund Site. These materials include a Fact Sheet, a Frequently Asked Question (FAQ) Sheet, and a list of all opportunities to get engaged at upcoming public discussions and meetings. We will be leaving the FAQ sheet and a door hanger with all the public meetings listed at EVERY house. We will be leaving the FAQ sheet, the list of public meetings AND the longer Fact Sheet while also hopefully having a brief conversation with ANY house that we make contact with an individual.

Our purpose for sponsoring this canvassing event is to create a more informed public regarding the cleanup options for the Allied Site, obtain citizen input, and encourage participation, transparency and accountability in the decision making process. Although we ourselves are citizens of Kalamazoo, none of us, not even the KRCC board, truly represents the residents of Kalamazoo or those who may be most affected by the choice of cleanup. Thus, the canvassing event is about getting the information out, rather than advocating for any particular option, so that those residents may get the information they need to speak for themselves. Given these representation issues and the constraints on our time, we have chosen to canvass the areas in nearest proximity to the site and will cover as much of the following neighborhoods as possible: Edison, Homecrest, Milwood, Westnedge Hill and S. Westnedge.

Canvassing Itinerary for September 25th and 26th
Sponsored by the Environmental & Sustainability Studies Program, WMU and the
Kalamazoo River Cleanup Coalition

Friday September 25th

- 1:00pm Information Session at Goodwill (420 E. Alcott Street)
Overview of the Cleanup Options, Proposed Plan and Materials
 Diane Russell, EPA Community Involvement Coordinator
Superfund Public Participation Process, How to Canvass
 Denise Keele, Environmental & Sustainability Studies Program, WMU
- 2:00pm Organize Groups, Distribute WMU T-Shirts & Materials
- 2:30pm Shuttle Canvassers to Homecrest, Milwood, Edison
- 3:00pm Canvass/Distribute Materials
- 6:00pm Shuttle Canvassers back to Goodwill
 Pizza Dinner

Saturday September 26th

- 10:00am Information Session at Goodwill (420 E. Alcott Street)
Overview of the Cleanup Options, Proposed Plan and Materials
 Diane Russell, EPA Community Involvement Coordinator
Superfund Public Participation Process, How to Canvass
 Denise Keele, Environmental & Sustainability Studies Program, WMU
- 11:00am Organize Groups, Distribute WMU T-Shirts & Materials
 Pizza Lunch
- 11:30am Shuttle Canvassers to Westnedge, South Westnedge
- Noon Canvass/Distribute Materials
- 3:00pm Shuttle Canvassers back to Goodwill

Canvassing Script

Hello! My name is (YOUR FIRST NAME) and I am helping get the word out about a **very important upcoming decision that affects you and all of Kalamazoo**. We are out here today on behalf of the WMU Environmental & Sustainability Studies Program and a local environmental group, the Kalamazoo River Cleanup Coalition, **to make sure you get all the information you need concerning the proposed cleanup plan of the Allied Superfund Site**. I have a lot of **great information to leave with you** about the different options and their tradeoffs and also **invitations to a series of upcoming public discussions**.

Are you already familiar with the Allied Site?

IF YES. Great! I hope you will review the EPA's proposed cleanup plan and share your input at the upcoming public discussions (review materials).

Do you plan to come to the Public Discussions/Meetings?

Do you have any specific concerns about the site?

Do you have any specific visions for the future use(s) of the site (or what you would like to see there)?

IF NO. The site borders your neighborhood – show map of location of site. Briefly review the Fact or FAQ sheet to familiarize them with the different options /tradeoffs. Let them know they can get more detailed information at the upcoming public discussions (review materials).

Do you plan to come to the Public Discussions/Meetings?

Do you have any specific concerns about the site?

Do you have any specific visions for the future use(s) of the site (or what you would like to see there) ?

THANK YOU FOR YOUR TIME! (say THANK YOU AS MUCH AS POSSIBLE!)

Canvassing Basics: The Dos and Don'ts

- Always stay with or in sight of your partner (exchange phone numbers before you go)
- DO NOT go inside houses
- DO NOT knock on any door you feel uneasy about
- DO NOT offer to shake people's hands at the door (only do so if they offer first)
- DO NOT try to answer questions or give more information –direct them to the materials and contact information

NEED HELP OR A RIDE? Call a Canvass Captain! Sarah Hill: 269-598-2970; Denise Keele: 217-899-6959; Gary Wager: 269-598-6274; Kevin Wordelman: 269-290-8656

Frequently asked questions

Allied Paper Landfill



September 2015

Summary of community questions

The Allied Paper Landfill is part of the Allied Paper/Portage Creek/Kalamazoo River Superfund site. The U.S. Environmental Protection Agency has been working with members of the community over the last several months to understand their questions and concerns. Here are some of the questions – and the answers – asked at those meetings. This FAQ will be updated as needed.

EPA's Recommended Cleanup Option

1. **Would EPA's recommended cleanup option protect people and the environment?**

Yes. EPA can only choose an option that protects.

2. **The consolidation and capping alternatives do not include a bottom liner. Is a landfill safe without a bottom liner?**

At Allied, adding a liner would not provide more protection. Liners prevent waste from moving off-site through groundwater. In this case, the PCBs are bound to the remaining waste materials, and water does not easily flow through them. So a liner is not necessary.

3. **Would stacking the waste higher cause contaminated water to be squeezed out, sending contamination into the groundwater?**

Piling excavated material onto existing material, causing compression, would actually make movement of the contamination more difficult in the long term. If we implement this plan, we will take samples during the design phase to better understand how to engineer the cleanup so the site remains stable. We will also monitor the groundwater to see if we need to do any treatment.

4. **What are the cleanup standards?**

EPA's cleanup standards at Allied Landfill protect humans and animals. The cleanup levels vary by area and by potential reuse. In wetland areas, the standards are designed to protect fishermen and animals that eat fish or worms. In places that may be redeveloped for commercial use, the standards are designed to protect people working at commercial properties. These standards are discussed in more detail in the technical version of the proposed plan.

5. **What is the timeline for cleanup?**

Alternative 2D would take about one year to design and three years to complete.

Protectiveness and Groundwater

6. **Has EPA cleaned up places like the Allied Landfill using capping, consolidation and monitoring?**

EPA has used this technology locally at the King Highway Landfill, 12th Street Landfill and the Willow Boulevard/A-Site Landfill. In these cases, PCBs have been properly managed without posing a risk to people or the environment. We have used the consolidation, capping and monitoring cleanup method successfully at dozens of landfills in the Midwest.

7. **Does the contamination at Allied Landfill affect Kalamazoo drinking water wells?**

No. EPA studied the groundwater and flow patterns and found that the groundwater is not flowing toward the city well fields. Also, we have not detected PCBs in the groundwater outside the site at levels that pose a risk to human health. Once the cleanup is done, we will continue to monitor the groundwater to make sure there is no contamination moving off-site.

What are PCBs? . . .

Polychlorinated biphenyls, or PCBs, belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. Once in the environment, PCBs do not readily break down and may remain for long periods of time in air, water and soil.

PCBs have been demonstrated to cause cancer, as well as other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system.

8. What were the results from your last testing of the wells?

Groundwater monitoring was done in 2003 and in 2014. Results show that PCBs are not leaving the site through groundwater. Because monitoring has shown that the PCBs have not moved, it's likely they will not move in the future.

9. How do you know the contamination won't move off-site?

In addition to the groundwater data, studies done on soil also shows PCB contamination is not mobile. The current risk of PCBs moving off-site is from erosion into Portage Creek. EPA's recommended alternative will eliminate this risk by combining contaminated materials farther away from the creek and covering them with an engineered cap. We will also monitor the site to make sure the cleanup remains protective.

10. How will you make sure the site is safe for public use?

Excavated areas will be safe to use since there will be no more contamination. At the capped areas, an engineered cap will protect people and animals from coming into contact with contamination. The areas will be safe for recreation, for example. We will monitor the cap to be sure the area remains safe.

11. How will you prevent groundwater from carrying PCBs off-site?

There is little evidence to support PCBs moving off-site through groundwater because the landfill material is very dense and clay-like, making it difficult for water to flow through it. Also, PCBs are hydrophobic – they don't like to dissolve in water. Given the nature of the material, we rarely find PCBs in groundwater at Allied Landfill. When we do, they are at low levels that do not pose a risk to people.

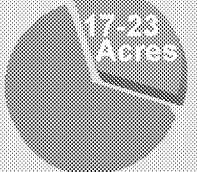

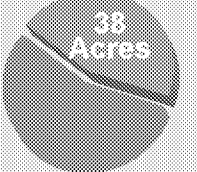
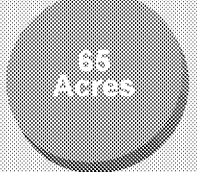
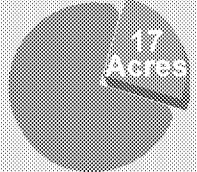
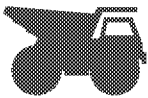
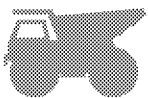













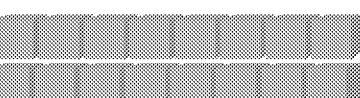

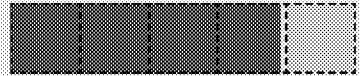
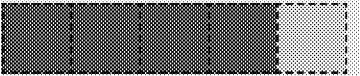
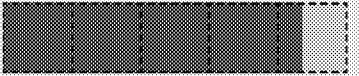


EPA Decision-making

12. Are there any alternative technologies that could be used?

We looked closely at a number of alternative technologies and concluded that none are viable options at Allied Landfill. To learn more, see Section 3 of the Allied Landfill Feasibility Study and a supplemental memorandum, both of which are at www.epa.gov/region5/cleanup/alliedpaper/index.html.

13. Why was removal and off-site disposal not chosen? Was it because of cost?

This option was not chosen for a number of reasons. When EPA weighed all the cleanup options, removal provided little or no additional protection compared to

Tradeoffs to Consider When Weighing Cleanup Options					
TRADEOFFS	CLEANUP OPTIONS				
	Alternatives 2A and 2B: Consolidation and Capping	Alternative 2C: Consolidation, Capping, and Treatment	Alternative 2D: Consolidation, Capping with reduced footprint	Alternative 3: Removal and off-site disposal	Alternative 4: Encapsulation containment system
Area available for reuse					
Short-term impacts from construction	<div>Fewer than 32,500 truckloads on the road</div> <div>32,600 truckloads on the road</div> <div>37,800 truckloads on the road</div> <div>150,000 truckloads on the road</div> <div>68,400 truckloads on the road</div>				
Trucks	<div>  = clean fill hauled onto site </div> <div>  = contaminated material hauled on public roadways </div>				
Impacts from truck traffic	<div>  2A = 22,500 truckloads; 2B = 21,600 truckloads;  2A and 2B = 10,000 truckloads </div>	<div>  21,600 truckloads  11,000 truckloads </div>	<div>  27,800 truckloads  10,000 truckloads </div>	<div>  39,100 truckloads  110,900 truckloads </div>	<div>  58,400 truckloads  10,000 truckloads </div>
Amount of PCB material to manage	<div>  </div>	<div>  </div>	<div>  </div>	<div>  </div>	<div>  </div>
Long-term effectiveness	<div>  </div>	<div>  </div>	<div>  </div>	<div>  </div>	<div>  </div>
Time to complete	2 years	2 years	3 years	5 years	10 years
Cost	\$43-44 million	\$70 million	\$63 million	\$238 million	\$159 million

capping and consolidation. There were several short-term impacts, including truck traffic, movement and management of a large amount of contaminated material, and time to reach protectiveness that EPA considered in addition to high cost (*see table, previous page*). Ultimately, our recommended option offered the best balance while protecting human health and the environment.

14. What are the costs associated with a plan that keeps the waste in place?

Leaving waste in place requires long-term maintenance to ensure the cleanup continues to protect people and the environment over time. For Allied Landfill, EPA estimates ongoing maintenance of consolidation, capping and long-term monitoring would be \$5 million.

Cost of Cleanup

15. If there was more money available, would you chose a more expensive remedy?

No. EPA cannot chose a remedy unless it is protective, and we do not select remedies based on how much money is available. Cost must be considered when selecting a cleanup plan, but so must:

- Long-term effectiveness and permanence.
- Reduction of toxicity, mobility or volume through treatment.
- Short-term effectiveness.
- Implementability.

In this case, we found the best balance of these factors with the recommended option.

16. Who will make sure that the landfill cleanup protects us long-term?

It is EPA's responsibility to make sure the cleanup protects people and the environment. Since the cleanup includes waste managed on-site, we would monitor the landfill cap and groundwater regularly, and share the results with the community. If we find any issues, EPA will fix them.

Future Use and Public Involvement

17. Who will own the site in the future?

That's uncertain right now. But whoever owns it in the future, EPA will ensure the cleanup protects people and the environment.

18. How will the public be involved in decision-making in the future?

EPA is committed to building communication and relationships with the community. Public discourse and feedback from stakeholder groups has helped EPA improve both our public communication and our cleanup plans. As we begin to build a cleanup work plan, we will continue to work with local partners and community members so their input and feedback is reflected in our planning.

For more information regarding the Allied Paper Landfill, contact the following:

Michael Berkoff
EPA Remedial Project Manager
312-353-8983
berkoff.michael@epa.gov

Diane Russell
EPA Community Involvement Coordinator
989-401-5507
russell.diane@epa.gov

Paul Bucholtz
Michigan Department of Environmental Quality
517-284-5072
bucholtzp@michigan.gov

Gary Wager
Executive Director, Kalamazoo River Cleanup Coalition
269-382-0490 Ext 271
www.kalrivercleanup.org



You are invited

EPA invites you to discuss the proposed cleanup plan for the Allied Paper Landfill site.

EPA will hold a public meeting, **Thursday, Nov. 19, at 6 p.m.**, at the Washington Writers' Academy cafeteria, 1919 Portage St. EPA representatives will present details of the plan, and oral comments will be accepted and recorded by a court reporter.

Also come to a community roundtable event: **Thursday, October 15, 6 p.m.** at the Washington Writers' Academy cafeteria, 1919 Portage St. or **Thursday, October 22, 6 p.m.** at the Hispanic American Council, St. Joseph Parish Gymnasium, 930 Lake St.

EPA representatives will be available to answer questions and participate in a discussion with the community about the plan.

Read the proposed plan

The detailed plan is available for review in the information repositories and on the Web (*see box, Page 4*).

Public comment period

You may comment on the proposed plan from **Sept. 30 through Dec. 1**.

There are several ways to offer comments:

- Fill out and mail the enclosed comment form, or submit it at the public meeting.
- Orally or in writing at the public meeting.
- Go to:
www.epa.gov/region5/cleanup/alliedpaper/pubcomment.html.
- Send a fax to 989-401-5508.

EPA may modify the plan or select another solution based on new information or public comments, so your opinion is important.

EPA Proposes Cleanup Plan for Allied Paper Landfill

Allied Paper/Portage Creek/Kalamazoo River Site

Kalamazoo, Michigan

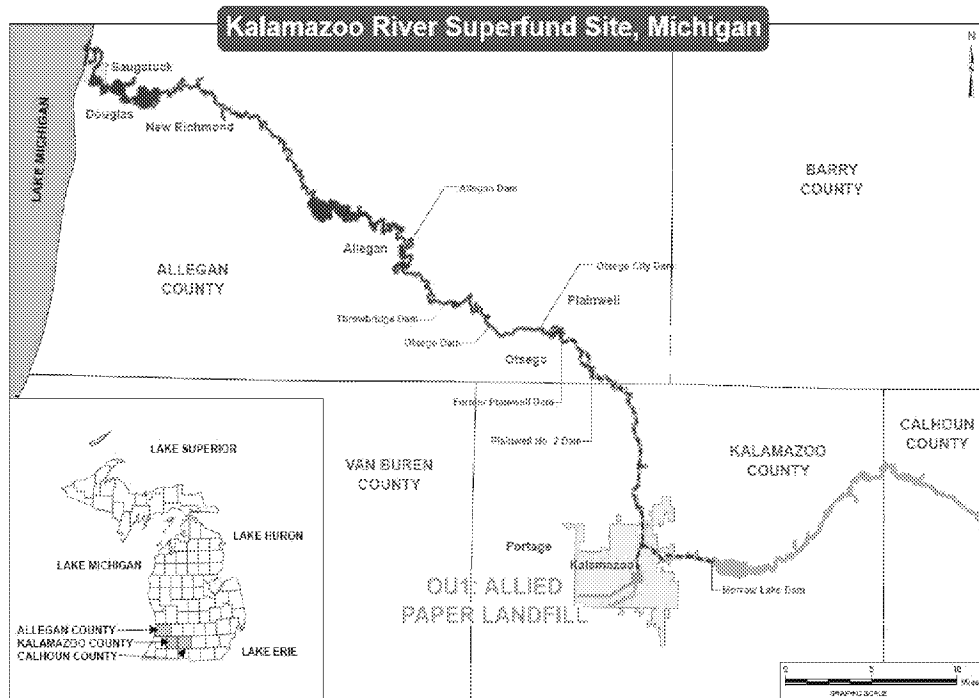
September 2015

The U.S. Environmental Protection Agency, with the Michigan Department of Environmental Quality, plans to clean up contaminated material at Allied Paper Landfill, a former landfill in part of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site called Operable Unit 1. The cleanup plan includes consolidating and capping material containing PCBs and other contaminants, and installing a groundwater monitoring network. Areas of the former landfill would be available for future reuse and redevelopment.

Your comments are needed

EPA will accept comments on the proposed cleanup plan from Sept. 30 through Dec. 1 (*see box, left*). This fact sheet provides background information, describes cleanup options and explains EPA's recommendations¹. You can find more details in a document called *Allied Paper/Portage Creek/Kalamazoo River Superfund Site Proposed Plan for Operable Unit 1 – Allied Paper Landfill*, at www.epa.gov/region5/cleanup/alliedpaper and at the local information repositories listed on Page 4.

EPA will review all comments before making a final decision on a cleanup plan, and will respond to comments in a document called a "responsiveness summary." This will be part of the final cleanup plan called the "record of decision."



¹ Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA known as the Superfund law) requires publication of a notice and a proposed plan. It also requires a public comment period and the opportunity for a public meeting. This fact sheet summarizes the technical written proposed plan and other site-related environmental reports that can be viewed at the information repositories listed on Page 4.

Background

Several paper mills along the Kalamazoo River and Portage Creek recycled various types of paper stock starting in the 1950s. This included carbonless copy paper containing PCBs that were released into the mills' waste streams and eventually into Portage Creek and the Kalamazoo River.

In 1990, the site was added to the National Priorities List because of PCBs in the sediment, fish and surface water of the Kalamazoo River. The site consists of 77 miles of the Kalamazoo River and a 3-mile stretch of Portage Creek, and is in both Allegan and Kalamazoo counties in southwest Michigan (*see map, Page 1*).

This plan is for Allied Landfill, between Cork Street and Alcott Street in Kalamazoo (*see map, below*). The landfill site includes areas that are zoned for residential, commercial and manufacturing uses, and Portage Creek runs through the property.

Why is a cleanup needed?

There have been several cleanups at Allied Landfill since the early 1990s to minimize exposure to PCBs and to stop the release of contamination to Portage Creek and the Kalamazoo River. Those actions included the removal of 146,000 cubic yards of PCB-contaminated material from the Bryant Mill Pond (the Portage Creek floodplain within the site boundaries) and consolidating and capping that material on-site. This work has decreased PCB levels significantly in Portage Creek itself and in fish.

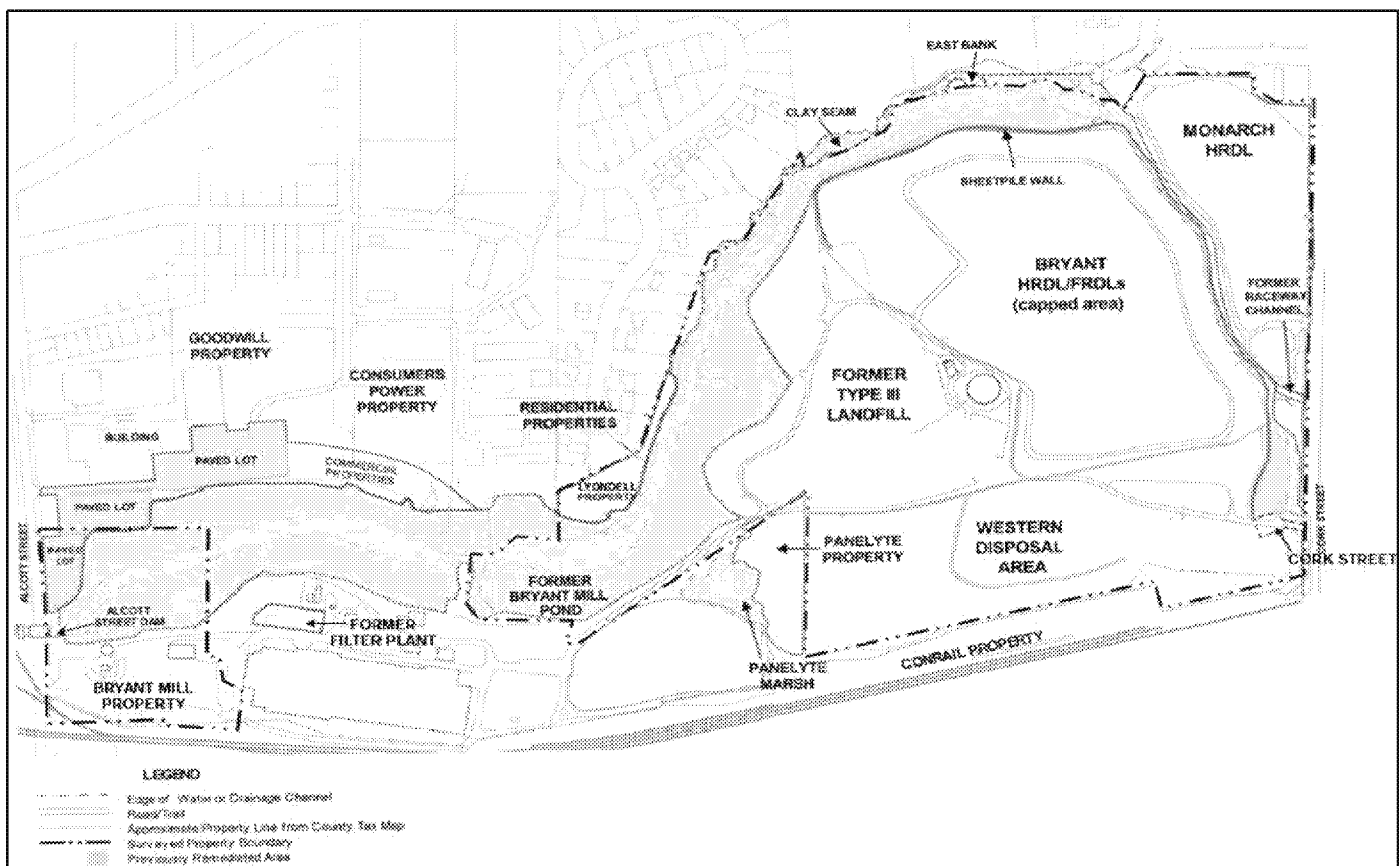


Aerial photo of Allied Landfill and Portage Creek

However, 1.6 million cubic yards of PCB contaminated material in the former disposal areas pose an unacceptable risk to people and the environment. The plan focuses on cleaning up these areas.

Cleanup alternatives

Based on site contaminants, characteristics, overall objectives and technology, EPA identified seven cleanup alternatives for the site (*see table, Page 5*). Each alternative was evaluated against criteria established by federal law (*see box, Page 3*). However, the last two criteria, state and community acceptance, will not be evaluated until after the comment period and public meeting. Each cleanup alternative, except the no-action alternative, reduces exposure to PCBs.



This map shows details of the Allied Landfill site.

Explanation of evaluation criteria

1. Overall protection of human health and the environment. Examines whether an option protects both human health and the environment. This standard can be met by reducing or removing pollution or by reducing exposure to it.

2. Compliance with applicable or relevant and appropriate requirements. Ensures options comply with federal and state environmental laws.

3. Long-term effectiveness and permanence. Evaluates how well an option will work over the long term, including how safely remaining contamination can be managed.

4. Reduction of toxicity, mobility or volume through treatment. Determines how well the option reduces the toxicity, movement and amount of pollution using treatment.

5. Short-term effectiveness. Compares how quickly an option can help the situation and how much risk exists while the option is under construction.

6. Implementability. Evaluates how feasible the option is and whether materials and services are available in the area.

7. Cost. Includes not only buildings, equipment, materials and labor, but also the cost of maintaining the option for the life of the cleanup.

8. State acceptance. Determines whether the state environmental agency (in this case the MDEQ) accepts the option. EPA evaluates this criterion after receiving public comments.

9. Community acceptance. Considers the opinions of the public about the proposed cleanup plan. EPA evaluates this criterion after a public hearing and comment period.

EPA's recommended alternative

Based on the criteria, EPA recommends Alternative 2D, consolidating materials to a 27-acre area, and installing a cap and a long-term groundwater monitoring network. Areas outside the cap would be available for commercial/industrial redevelopment, and the capped area would be available for some recreational reuse. Alternative 2D is protective, complies with environmental laws, and represents the best balance of long-term and short-term effectiveness, implementability and cost.

Alternative 2D would meet the EPA's cleanup goals for the site because it would:

- Significantly reduce the exposure of people and animals to contamination;
- Comply with federal and state regulations;
- Provide a cost-effective way to manage PCB contamination; and
- Complete activities within three years.

Next steps

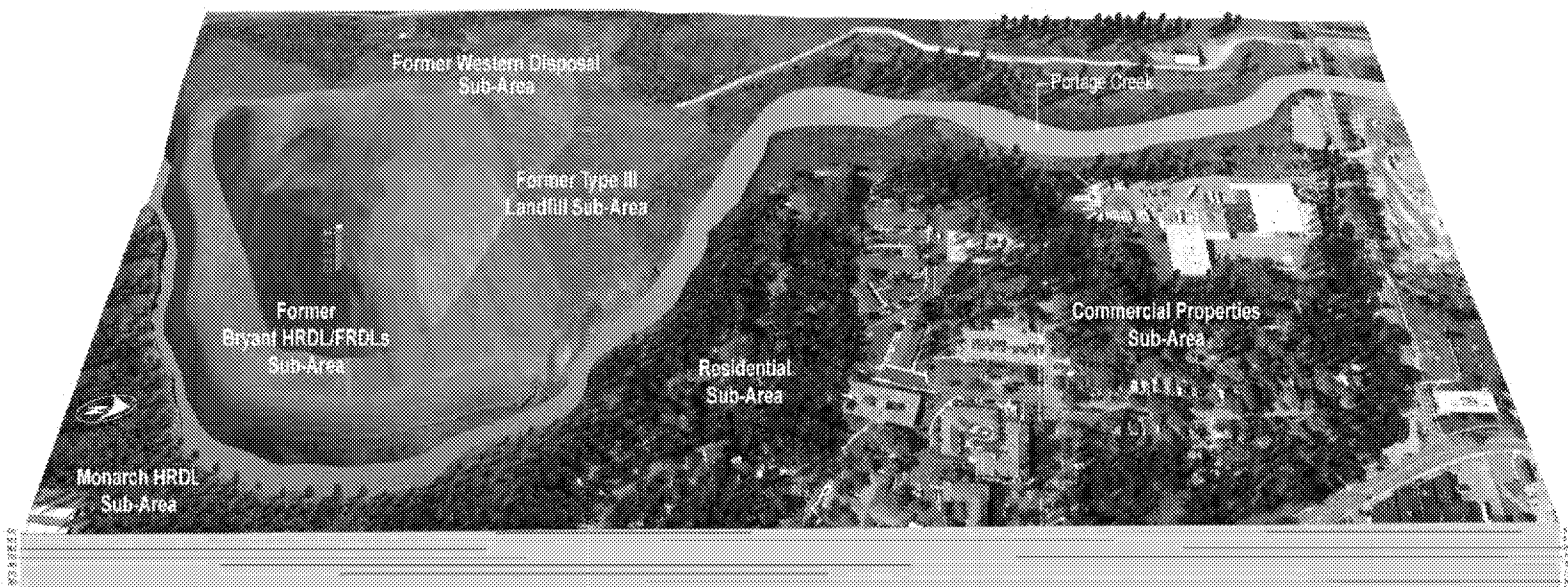
Before making a final decision, EPA and MDEQ will review all comments from the public. EPA will respond to the comments and make those responses available in the final decision document. EPA could change the recommended cleanup plan based on public comments.

EPA will announce its final cleanup plan in a local newspaper advertisement. Copies of the final plan will be available at the information repositories (*see Page 4*) and at www.epa.gov/region5/cleanup/alliedpaper.

For more information, contact:

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3-D Representation of Alternative 2D

For more information

You can read documents related to the Allied Paper Landfill site at www.epa.gov/region5/cleanup/alliedpaper, or at these information repositories:

U.S. EPA Record Center
77 W. Jackson Blvd., 7th Floor
Chicago

Charles Ransom Library
180 South Sherwood
Plainwell

Kalamazoo Public Library
315 South Rose
Kalamazoo

Allegan Public Library
331 Hubbard St.
Allegan

Otsego District Library
219 South Farmer St.
Otsego

Saugatuck-Douglas Library
10 Mixer St.
Douglas

Waldo Library
Western Michigan University
1903 W. Michigan Ave.
Kalamazoo

Cleanup Alternatives Comparison Table

Cleanup Alternatives	Description	Protective	Time to Implement Cleanup	Short-term Impacts	Cost
1- No Action	Required baseline to compare with other alternatives. Site would be revisited every 5 years accounting for minimal cost.	No	N/A	No worker risk, but offsite migration remains.	\$110,000
2- Consolidation and Capping	All Group 2 Alternatives have the following common elements: <ul style="list-style-type: none"> Excavate contaminated materials along lagoons, disposal areas. Consolidate contaminated material and backfill with clean material. Install a cap over consolidated areas. Install a long-term groundwater monitoring system. Install site restrictions to limit commercial and residential use. Restore wetlands. Monitor underlying groundwater. 				
Alternative 2A: consolidate and cap two areas (Monarch and Operational areas)	Install two separate caps over Monarch area and Operational areas.	Yes	2 years	Least impacts from construction, truck traffic, noise, dust.	\$44 million
Alternative 2B: consolidate and cap one area (Operational area)	Remove material in Monarch area and consolidate under one cap in Operational area.	Yes	2 years	Some impacts due to moving of Monarch material.	\$45 million
Alternative 2C: excavation and consolidation of contaminated areas and offsite incineration of excavated material	For excavated material: consolidate contaminated material with PCB contamination levels below 500 mg/kg, and transport PCB-contaminated material with contamination levels above 500 mg/kg to an offsite location for incineration. Remove material at Monarch and consolidate under one cap in Operational area.	Yes	2 years	Some impacts due to potential exposure during construction and transport offsite.	\$70 million
Alternative 2D: consolidation of contaminated areas into reduced area (EPA's recommended option)	Consolidate contaminated material into a smaller sized area set back from Portage Creek to create an area available for redevelopment and community use in the future. Remove material at Monarch and consolidate under one cap in Operational area.	Yes	3 years	Some impacts due to increased excavation, backfill volumes and slightly longer timeframe.	\$63 million
3- Removal and off-site disposal of contaminated material	Excavate contaminated areas and transport the material offsite for disposal. Backfill with clean material and install site restrictions to limit commercial use.	Yes	5 years	Higher impacts due to volume of material; high risk of excavated material impacting Portage Creek and greatest amount of truck travel for disposal and brining backfill material on-site.	\$238 million
4- Encapsulation containment system	<ul style="list-style-type: none"> Excavate contaminated areas and consolidate the excavated material. Line the landfill bottom with compacted clay and a flexible synthetic material. Place contaminated material in the lined area. Install cap over material. Install site restrictions to limit commercial use. Restore wetlands and monitor groundwater. 	Yes	10 years	Highest impacts due to volume of material potentially impacting Portage Creek and duration, not as many transportation impacts as Alternative 3 since material is managed at site.	\$159 million

EPA Proposes Cleanup Plan, Seeks Public Comments

Public Meeting
Thursday, Nov. 19
6 p.m.

Washington Writers' Academy
Cafeteria
1919 Portage St.

If you will need special accommodations at the meeting, contact:
Diane Russell, Community Involvement Coordinator, 989-401-5507, russell.diane@epa.gov

ALLIED PAPER LANDFILL SITE:
EPA Proposes Cleanup Plan



United States
 Environmental Protection
 Agency
 U.S. EPA Region 5 Superfund Division
 Saginaw Community Information Office
 304 S. Hamilton St., Suite 111
 Saginaw, MI 48602

City _____ State _____ ZIP _____

Allied Paper Landfill Comment Sheet

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Place
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Here

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